

*Please cancel the current Abstract and replace it with the following new Abstract:*

A device for detection of magnetic permeability  $\mu$  or, alternatively, relative magnetic permeability  $\mu_r$  or, alternatively, relative magnetic susceptibility ( $\mu_r - 1$ ) of a sample, wherein said device contains a sample chamber and at least two coils, one coil surrounding said sample chamber and one coil placed so as to be in thermal contact by being physically connected to the material which constitutes the sample chamber, but without surrounding the cavity of the sample chamber, said sample chamber having at least one opening for introduction of a sample or a sample container holding a sample, said device also provided with an electronic circuit which measures the difference in inductance between the two coils.